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San Diego

SPAWARSYSCEN

SYSTEMS SUPPORT ENGINEERING DIVISION

CODE D65

Presentation Areas

- **Equipment Repairs.**
  - Production Shops
- **QA / Safety.**
  - QA
  - ESD, Safety, OSHA
- **Workspaces.**
  - Shared
  - Facility Security

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Presentation Areas
(cont)

- **Customers.**
  - Fleet, NAVICP, Misc.
  - Services Provided
    - T/A
    - Material Acquisition
  - Goal
    - RTAT
- **Administration Requirements.**
- **Expectations.**

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Equipment Types

- The Depot supports many variations of US Military electronic equipment. These range from submarine ESM systems, to surface ship IFF, and all aspects of communications equipment.

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Production Shops

- Antenna Repair.
- Calibration Laboratory.
- TACAN.
- UHF.
- Engineering Laboratory.
- SSR-1.
- Module Repair.

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Production Shops
(cont)

- Manufacturing.
- WLR-8/BRD-7.
- WRC-1/HF/NAVMACS.
- UYQ-34.
- Mobile Radio.
- IFF.
- Teletype.

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Antenna Repair

- **Antenna Repair** incorporates a wide array of antennas on U.S. Naval ships. Technical assistance is provided for the entire range of services. This includes any request, from an operational inspection and review, to a complete system overhaul which involves removal, transport, overhaul, re-transport and re-installation with operational check. Systems include OE-82, IFF, and TACAN.

The Calibration Laboratory

- **The Calibration Laboratory** workload involves maintaining the accuracy of the Depot Test Equipment. Test equipment used in conjunction with the repair effort is calibrated at government expense. Contractor input includes scheduled preventive maintenance actions such as operational checks and visual inspection of air filters.

- The Calibration Lab is a regionally recognized facility capable of responding to the needs of all military services including pick up and delivery.

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TACAN & UHF

- **TACAN** Workload includes World-Wide travel and maintenance of legacy systems while keeping pace with new developments. Systems include AN\URN-25.

- **UHF** Workload includes Satellite Communications, line of sight transceivers and their fleet peripherals. Systems include AN/WSC-3, OA-9123 and TD-1271B/U.

Engineering Laboratory

- **The Engineering Laboratory** provides analysis of system and circuit symmetry when OEM electronic details are not available.

- Capability development is an integral part of the Depot operation.

- Responding to equipment obsolescence is a major consideration.

SSR-1_

- **SSR-1** Fleet systems include standard and upgraded versions. Both systems still exist in the Fleet and may require modification.

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Module Repair

- **Module Repair** includes, disassembly, manufacture (circuit board construction, OEM acquisition of replacement components) re-assembly, alignment and testing, re-installation and operational check.

- Module repair supports supply system requirements (7G, 7H), and direct fleet support.

Manufacturing & WLR-8 and BRD-7

- **Manufacturing** involves blueprint and specification analysis to fabricate an item. Work processes include raw material acquisition, adaptation and assimilation into the operating environment.

- **WLR-8 and BRD-7** equipment is supported throughout the life cycle. Technical assistance is a growing reality. Workload ranges from minor repair to major overhauls.

HF/NAVMACS, UYQ-34 & Mobile Radios

- **HF/NAVMACS** Legacy equipment includes WRC-1 family, ON-143, UYK-20 and TT-624.

- **UYQ-34** Marine air traffic display and control unit.

- **Mobile Radios** are repaired or overhauled according to customer request. Customers include the Navy, Marines and Coast Guard. Equipment includes VRC-46, and PRC-104.

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IFF & Teletype

- **IFF** Legacy equipment includes UPX-23 and UPX-24.

- **Teletype**/teleprinter equipment although obsolete still has a use for some operating units and a repair capability is maintained. Equipment includes UGC-136, TT-624, and KSR-35.

QA, Electro Static Discharge, Safety, OSHA.

- **Quality Assurance** is woven through written guidelines, into the entire process from original costing to the final inspection of the out-put product.
- Safeguarding Electrically-sensitive processing is an integral part of the overhaul-repair process. Technicians and visitors must observe static prevention measures.
- Environmental conditions, including worker safety, accident prevention, including hazardous material handling, is a high priority and attitude continually promoted.

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Facility Security.

- The Government Facility is classified. This is to accommodate the requirements for work being performed where classified criteria is involved.

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Shared Work Space

- “Civil Service” and “Contractor” Employees.
- Through the years of “Down Sizing” the number of civilian personnel decreased and the contract work force increased.
- The tradition of the Depot is work beyond the capacity of “Civil Service Personnel” will be done on contract.

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Shared Work Space
(cont)

- The facility, although owned and operated by the government, is utilized by the contract work-force. Work benches are provided and in some cases shared where the-work-process-sequence is critical to the restoration/repair process.

Shared Work Space (Cont)

- Cooperation between contractor and civil service personnel is key to the successful accomplishment of any assigned task. Resolution of mutual problems complements a high quality product and encourages innovation.

- Problem resolution and innovation contributes greatly to expanding the product line and increasing the efficiency of both the equipment restored and the process of restoration.

Who is the customer ?

- The customer is the Fleet, Parts Replenishment Commands, shore based commands and other in-house codes. The Fleet is any U.S. surface ship, submarine, Coast Guard ship or any Foreign Military Sales (ship requirement).

- A Parts Replenishment Commands is “Naval Inventory Control Point”.

- Shore based commands include The Marine Corp and The U.S. Air Force.

“Repair Turn Around Time” (RTAT)

- The time the equipment is taken out of operational service, restored and returned to service, is referred to as “Repair-Turn-Around-Time”.

- The efficiency of the Depot-Operation directly affects the “RTAT”.

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Service to the Fleet

- The Vision is “Service To The Fleet”. We support the “War fighter platform” where ever it may be.
- The “Fleet Mission Needs” are beyond the control of the Depot.
- Immediate response is the driving factor.

Technical Assistance

- We service the customer, whether he walks through the door or calls for technical assistance from the other side of the world.

- Technical Assistance includes every aspect of the equipment operation and resolution of technical problems, ***associated or not*** with the assistance task.

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Material Acquisition

- If the material is available in the Federal Supply System and is ready for issue, it is acquired.

- If the material is not available in the Federal Supply System, a market analysis must be initiated to acquire the material from the open market.

The Painting Process

- A paint shop is maintained. The license is maintained by the government.
- City permits are obtained and maintained by the government. The Paint shop is closely monitored for Hazardous Waste Compliance.
- A closed-loop washing system is maintained by the government and operational observance is required by paint shop personnel, to supplement government monitoring, for preventive maintenance.
- An additional closed-loop washing system is stationed in the production area.

Electronic Information Transfer

- A government developed accounting and asset tracking system exists.

- Contractor personnel utilize the software for employee work hour tracking, restoration material acquisition for government and contract work requirements, expenditure record keeping, accounting, and invoice preparation.

Electronic Information Transfer (cont)

- The expenditure information is transferred to the government every week.
- Company proprietary information is maintained via an “Electronic Backbone”. Only the expenditure compilations are transferred through pre-determined “Transfer Protocols”.
- This process permits virtual “Real-Time” cost accounting.

Electronic Information Transfer (cont)

- Because of the need to respond immediately to the customer, a unique accounting process was originated.

- The process involves assigning a tracking number called “ICN” (Inventory Control Number) to the customer unit(s). Charges accumulated for the unit(s) are applied to the delivery order.

Electronic Information Transfer (cont)

- A Delivery Order is established for a pre-determined "Area of Endeavor".
  - Examples of areas of endeavor are:
  - "Fleet", "Calibration" and "Naval Inventory Control Point (NAVICP)".

- Upon receipt, units are identified by National Stock Number (NSN) and assigned an Inventory Control Number (ICN). If no NSN exists then the Equipment Name is used. The ICN is recorded under the Delivery Order established for the applicable "Area of Endeavor".

Electronic Information Transfer (cont)

- Multiple customers may exist within an “Area of Endeavor”. An example, of multiple customers in an area of endeavor, is an unlimited number of “Fleet” ships with varying equipment malfunctions or an ongoing refurbishment project with varying tasks. Each ship is assigned an ICN.
- Each NSN (quantity of) identified for repair is assigned another ICN and recorded/tracked under the “ship-ICN-and-pertinent-Delivery-Order”.
- This process permits accurate cost accounting for all equipment by ship and NSN.

Electronic Information Transfer (cont)

- As work progresses, hundreds of ICNs can be tracked simultaneously and accounted for to the pertinent Delivery Order as expenditures accumulate and are transferred to the government.
- Query only progress reports are available to the Contracting Officer's Representative for viewing at the "Backbone" level.
- The capability for generating invoices has been developed and historically approved at the DCAA auditor level.

Traditional Expectation

- **Traditional expectation**
  - The Depot has a well established tradition of partnership with Small Disadvantaged Businesses.
  - Through the years, the Depot customer base has increased.
  - The efficiency, cost effectiveness and innovation demonstrated, has provided the bases of increased business. This actuality has placed the Depot in a unique position of responsibility to the Fleet.

Traditional Expectation (cont)

- Due to diminished funding, customers require fast service, for specific tasks.
- The tasks requested have led to creative solutions for intransigent problems.
- Creative thinking for resolution of difficult issues, leads to cutting edge responsiveness, which is a driving factor for service to the Fleet and creation new business.

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Traditional Expectation (cont)

- This places the Depot in the position of service which has no slack.
- We must continue to perform without regard for contractual transition.
- The new award is expected to possess the expertise capable of immediate performance.

“Contractor Office Spaces”

- The Government has provided Contractor Office Spaces, within the government facility.
- The office spaces provided, have privacy for conducting proprietary business.
- Government computers including software are provided for tracking labor.
- Hours, asset progress, material acquisition, electronic transfer protocols and all expenditure compilation, including invoicing preparation.

SYSTEMS ENGINEERING SUPPORT

- Capability Management Planning and Execution
- Installation and Design Services.
- Logistic support.
- Hardware / software development.
  - Server Maintenance.
  - Software Maintenance .